

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

THUNDER RIVER RANCH LLC
6886 WING POINT RD NE
BAINBRIDGE ISLAND, WA 98110-2985

2. Type of action:

Combined application for Beneficial Water Use Permit No. 41A 30154952 and
Change Application Nos. 41A 30154953 & 41A 30159796

3. Water source name:

Ground Water, and Big Sheep Creek

4. Location affected by project:

The Affected Reach as outlined by Brickle in the Groundwater Permit with
Mitigation Report, Big Seep Creek at E2NE Sec 34 4S 10W and E2 Sec 27 4S 10W.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert groundwater by means of a pond, from January 1 to December 31 up to 19.2 AF, from a point located in the W2SENE of Section 34, R14S, R10W, Beaverhead County, for the purpose of fisheries from January 1 through December 31 of each year. The place of use is generally located in the SENE of Section 34, T14S, R10W, Beaverhead County.

Additionally, The Applicant proposes to change a portion of Water Right Claim Nos. 41A 94502-00 & 41A 94503-00 from their historical use of irrigation to the purpose of mitigation. Both claims have historically drawn surface water out of Big Sheep Creek for the flood irrigation of 340.4 acres. The flow rate for 41A 94502-00 is 3.0 CFS and 41A 94502-00 is 4.0 CFS. The priority date on both water rights is October 14, 1886 and the claimed period of is June 1st through October 15th. The proposed change is to retire 3.6 acres of irrigation from E2NE Sec 34 14S 10W. This water, equaling 2.9 AF will then be used for mitigation, to offset potential adverse effect created from the proposed project Permit No. 41A 30154952.

Lastly, the Applicant proposes to change a portion of Water Right Claim No. 41A 30113656 from its historical use of stock drinking directly from Big Sheep Creek to the purpose of mitigation. This water right has historically been used at 27 & 34 14S 10W and 2, 3, & 11 15S 10W. The period of diversion/use for this water right is year-round, and the water was first put to beneficial use on October 14th, 1886 (per Case No. 3808 Beaverhead Co). The proposed change is to retire 108 head of cattle from drinking directly from Big Sheep Creek through the months of April and May. This water, equaling 0.6 AF will then be left in Big Sheep Creek for the purpose of mitigation, to offset potential adverse effect created from the proposed project Permit No. 41A 30154952.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

- Montana Natural Heritage Program (MTNHP)
- USDA Web Soil Survey
- Montana Department of Environmental Quality

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No Impact

All proposed increase in consumed water will be mitigated by the retirement of acres from 41A 94502-00 & 41A 94503-00 and by the reduction in stock use from 41A 30113656.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No Impact

Big Sheep Creek is not listed as impaired by the Montana DEQ.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No Impact

Per Groundwater Permit with Mitigation Report, by Brickle of the Water Sciences Bureau, no water rights within the zone of influence will experience a drawdown higher than 1 foot over a 5-year period.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No Impact

The proposed pond is off stream with no surface connections to Big Sheep Creek. Depletions caused by this use will be mitigated by the proposed changes.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”*

Determination: No Impact

There are 58 Species of Concern (SOC) with some Predicted Suitable Habitat within the county of the Place of Use for the Proposed Permit and Change Applications, although there are no known SOC's within the reach of the project. Given the scope of this project (converting cropland into an off-stream pond), and the fact that the proposed pond has existed in its current state for the past 30 years, it is unlikely that it will adversely affect any species of concern. No native habit is being destroyed or affected in this change. Reduced flows on Big Sheep Creek caused by Beneficial Water Use Permit No. 41A 30154952 will be mitigated by Change Application 41A 30154953 & 41A 30159796.

Per Hartman's (of the Montana Sage Grouse Habitat Conservation Program) letter dated October 27th 2021, the proposed project will have no impact on Sage Grouse survivability.

The SOC's identified within the Beaverhead County are:

Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*)
Arctic Grayling (*Thymallus arcticus*)
Bull Trout (*Salvelinus confluentus*)
Lake Trout (*Salvelinus namaycush*)
Great Gray Owl (*Strix nebulosa*)
Ferruginous Hawk (*Buteo regalis*)
Sage Thrasher (*Oreoscoptes montanus*)
Green-tailed Towhee (*Pipilo chlorurus*)
Columbia Plateau Pocket Mouse (*Perognathus parvus*)
Western Toad (*Anaxyrus boreas*)

Golden Eagle (*Aquila chrysaetos*)
Dwarf Shrew (*Sorex nanus*)
Trumpeter Swan (*Cygnus buccinator*)
American White Pelican (*Pelecanus erythrorhynchos*)
Great Blue Heron (*Ardea herodias*)
Northern Bog Lemming (*Synaptomys borealis*)
Western Pygmy Shrew (*Sorex eximius*)
White-faced Ibis (*Plegadis chihi*)
Lewis's Woodpecker (*Melanerpes lewis*)
Black-necked Stilt (*Himantopus mexicanus*)
Franklin's Gull (*Leucophaeus pipixcan*)
Mountain Plover (*Charadrius montanus*)
Snapping Turtle (*Chelydra serpentina*)
Preble's Shrew (*Sorex preblei*)
Clark's Nutcracker (*Nucifraga columbiana*)
Cassin's Finch (*Haemorhous cassinii*)
Brewer's Sparrow (*Spizella breweri*)
Merriam's Shrew (*Sorex merriami*)
Greater Sage-Grouse (*Centrocercus urophasianus*)
Wolverine (*Gulo gulo*)
Brown Creeper (*Certhia americana*)
Townsend's Big-eared Bat (*Corynorhinus townsendii*)
Evening Grosbeak (*Coccothraustes vespertinus*)
Grizzly Bear (*Ursus arctos*)
Pileated Woodpecker (*Dryocopus pileatus*)
Long-eared Myotis (*Myotis evotis*)
Long-legged Myotis (*Myotis volans*)
Long-billed Curlew (*Numenius americanus*)
Little Brown Myotis (*Myotis lucifugus*)
Spotted Bat (*Euderma maculatum*)
Fringed Myotis (*Myotis thysanodes*)
Canada Lynx (*Lynx canadensis*)
Flammulated Owl (*Psilosops flammeolus*)
Bobolink (*Dolichonyx oryzivorus*)
Black-backed Woodpecker (*Picoides arcticus*)
Veery (*Catharus fuscescens*)
Harlequin Duck (*Histrionicus histrionicus*)
American Bittern (*Botaurus lentiginosus*)
Pacific Wren (*Troglodytes pacificus*)
Pinyon Jay (*Gymnorhinus cyanocephalus*)
Thick-billed Longspur (*Rhynchophanes mccownii*)
Varied Thrush (*Ixoreus naevius*)
Greater Short-horned Lizard (*Phrynosoma hernandesi*)
Loggerhead Shrike (*Lanius ludovicianus*)
Fisher (*Pekania pennanti*)
Gray-crowned Rosy-Finch (*Leucosticte tephrocotis*)
Northern Leopard Frog (*Lithobates pipiens*)
Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*)

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No Impact

The proposed permit and changes do not involve wetlands.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No impact

The purpose of the permit is to create a pond and stock it with fish. The pond will have no surface inflows or outflows so it is unlikely stocked fish will be introduced into Big Sheep Creek. The Department also has conditioned the permit with a requirement to obtain an FWP Stocking Permit. This will ensure that non-native species are not introduced into the system.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No Impact

Irrigation practices will remain within the existing irrigation footprint, and the irrigated area will be reduced under the proposed change. Per the USDA data, the soils in the area surround the project appear to be stable, and saline seep does not appear to be an issue. The USDA also reports that the soils within the reach are complex and occasionally flooded, which the National Library of Medicine has shown to reduce salinity levels.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No Impact

The proposed project is to reduce irrigated cropland and install a pit pond in most of the retired acres. In the 1.1 retired acres where the pond has not been dug the vast majority of the area is covered by a driveway and a domestic dwelling. This leaves the area of potential impact exceedingly small, and the impact to vegetation cover and weed presence effectively zero.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No Impact

There is no expected change in air quality with either the proposed permit or change applications.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: Not Applicable

The proposed project is not located on state or federal land and this section is applicable (MCA 22-3-421).

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No Impact

Any reductions to surface caused by the proposed permit will be mitigated by the change applications.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No Impact

The Department has found no evidence of existing county level ordinances, zoning restrictions, or other plans that may have been developed at the county or city level that would put this project outside of compliance.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No Impact

The proposed project is on privately owned land.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No Impact

The proposed project will not adversely effect human health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No_x___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No Impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No Impact
- (b) Local and state tax base and tax revenues? No Impact
- (c) Existing land uses? No Impact
- (d) Quantity and distribution of employment? No Impact
- (e) Distribution and density of population and housing? No Impact
- (f) Demands for government services? No Impact
- (g) Industrial and commercial activity? No Impact
- (h) Utilities? No Impact
- (i) Transportation? No Impact
- (j) Safety? No Impact
- (k) Other appropriate social and economic circumstances? No Impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts

None Identified

Cumulative Impacts

None Identified

3. *Describe any mitigation/stipulation measures:*

All required mitigation has been provided by Change Application Nos. 41A 30154953 & 41A 30159796.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

No Environmental or human impact is likely. The proposed permit creates a beneficial use, as defined in MCA 85-2-102(5) and expanded in the Preliminary Determination for this project. The Applicant has taken reasonable measures to mitigate adverse effects. There are no reasonably available or prudent alternatives.

PART III. Conclusion

1. Preferred Alternative

No preferred alternatives identified.

2 Comments and Responses

None

4. Finding:

Yes___ No__**x**_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An Environmental Assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.

Name of person(s) responsible for preparation of EA:

Name: Mitchell Hoffman

Title: Water Resource Specialist

Date: 11/29/2023